#7 Recent Seismicity in Nevada and Report from the Seismological Laboratory, University of Nevada, Reno

NESC Quarterly Meeting— February 3rd, 2016

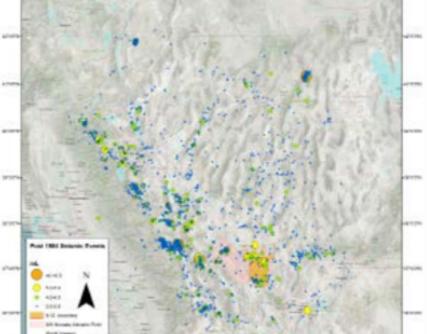
> Dr. Graham Kent Nevada Seismological Laboratory



WHAT'S SHAKING

newsletter of THE NEVADA SEISMOLOGICAL LABORATORY





Earthquake Update

This month has continued to be very active in Nevada! We will highlight continued activity in Sheldon, and events in Reno, and Central Nevada.

arthquake activity has continued in the last month -- and in places where many of us have felt it. (The Reno events of December 22 will be highlighted in the next section.)

ost notably, the long on-going sequence in northern Washoe County has continued with several more M4.0 events. The series of earthquake began in July 2014 and it is not showing signs of stopping.

Additionally, we have also located events to the east of the Sheldon Sequence, near the Black Rock Desert. This swarm had a M4.2 on December 28, with a large cluster of smaller events occurring in the surrounding days.

Also of interest, an event in the heart of the Las Vegas Strip! This M1.2 event was very small (below human detection) but it occurred on December 28 just below the Las Vegas Casinos! Though not damaging, this event does serve as a reminder that Las Vegas can and DOES have earthquakes!

If you have any additional questions on these or other events in Nevada, please contact the Nevada Seismological Laboratory!

ALERT Tahoe News

ALERT Tahoe in the News!

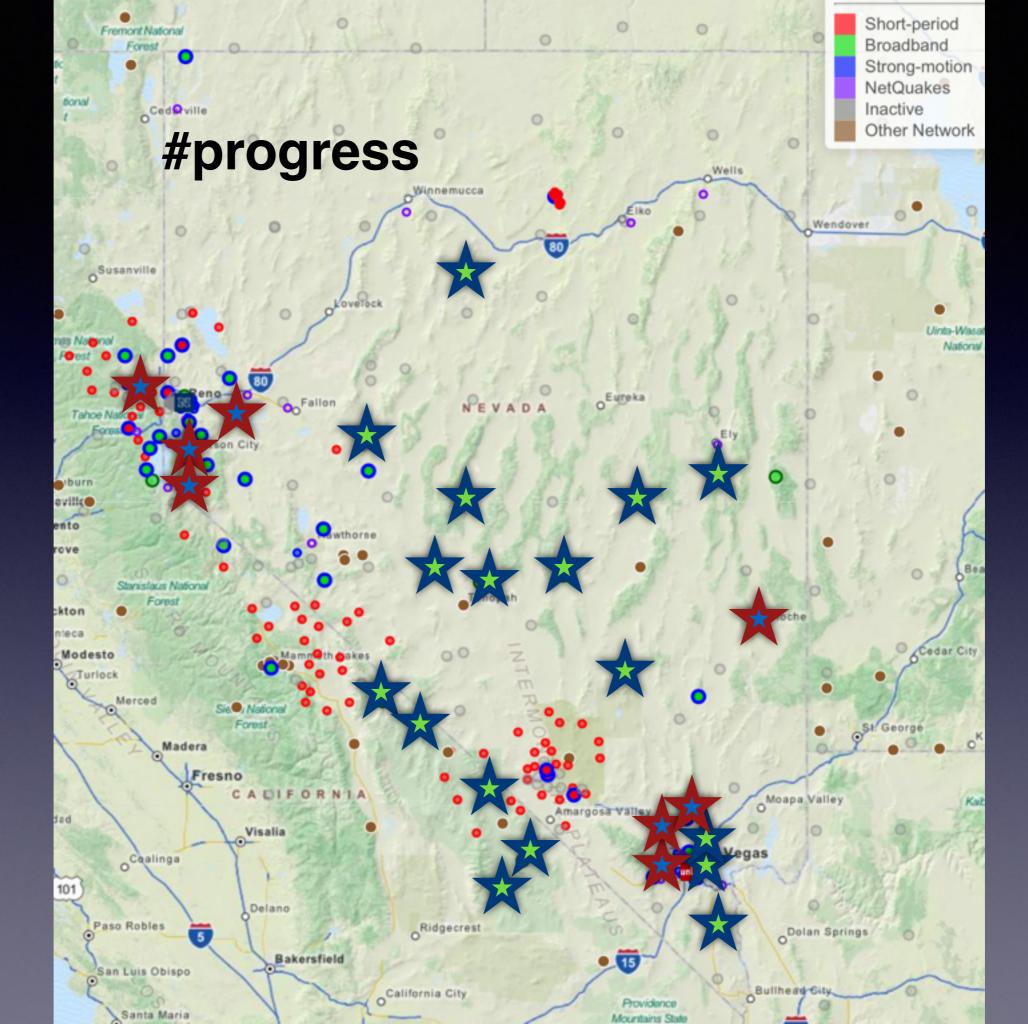
High Country News recently published a story on the work being done with fire cameras in the Tahoe Region.

The article highlights how modern technology using the communication network in place for seismic monitoring is the "new" fire lookout.

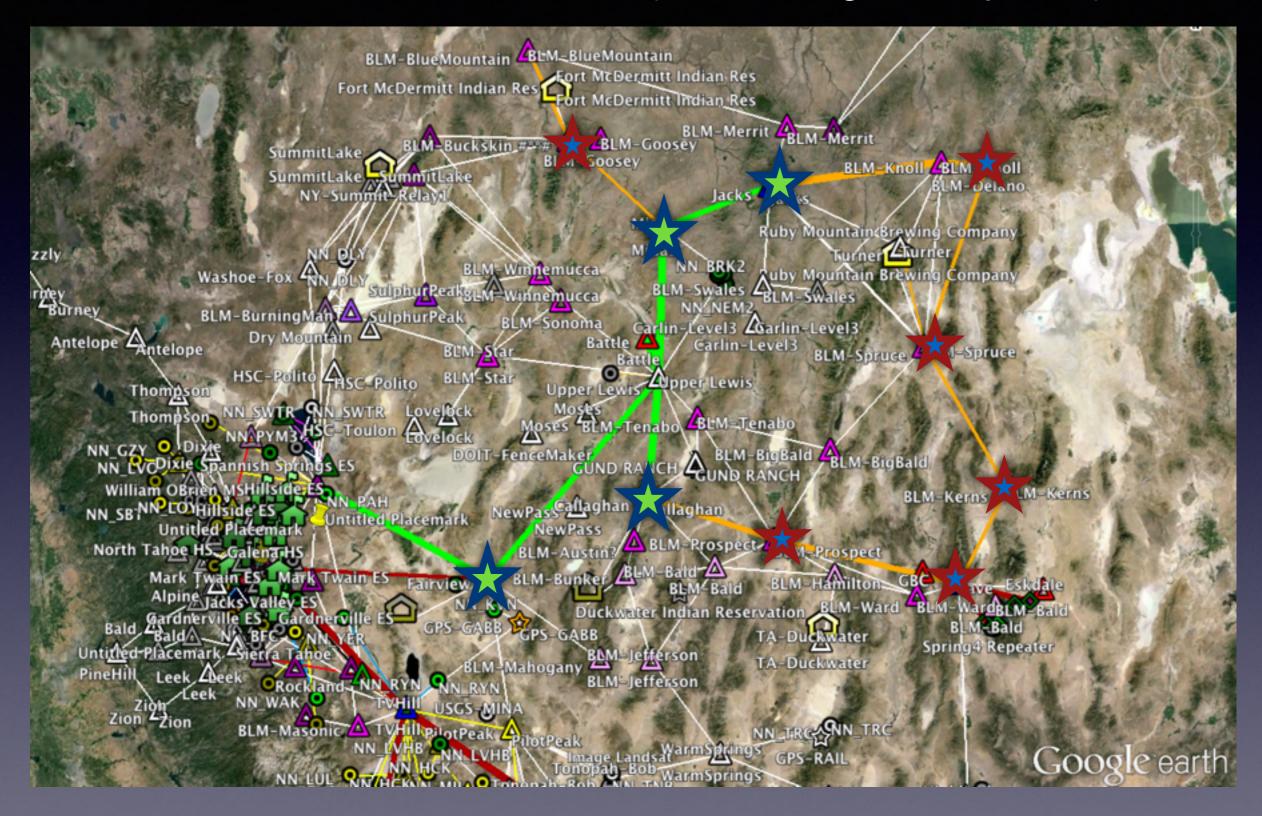
Take a look at this interesting article for yourself!

http://www.hcn.org/issues/47.21/ the-last-stand-of-the-wests-firelookouts

www.seismo.unr.edu @NVSeismoLab



BLM Fire Camera Network (2016 orange-next phase)



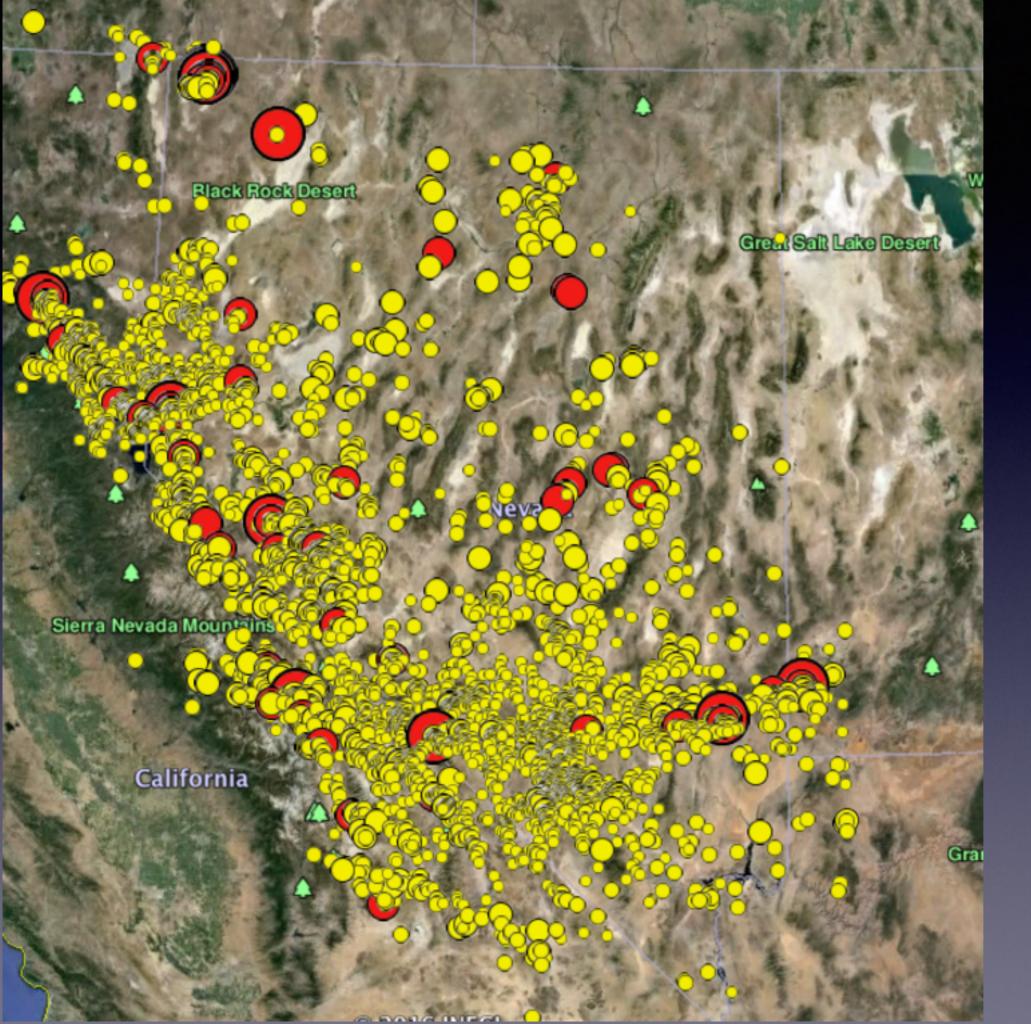
AlertTahoe Seismic & Fire Camera Network Topology **Existing Fire Camera** Funded, 2015/6 Install 2015 TPC Early 2016 2016 Summer Install Sierra Front Camino -backbone network topology shown Broadband Seismometer Broadband Seismometer with Strong Motion Future Broadband Seismometer with SM Short Period Seismometer with Strong Motion Short Period Seismometer (Analog) Optional: Seismic Warning System's EW sensors

AlertTahoe

USFS & TPC

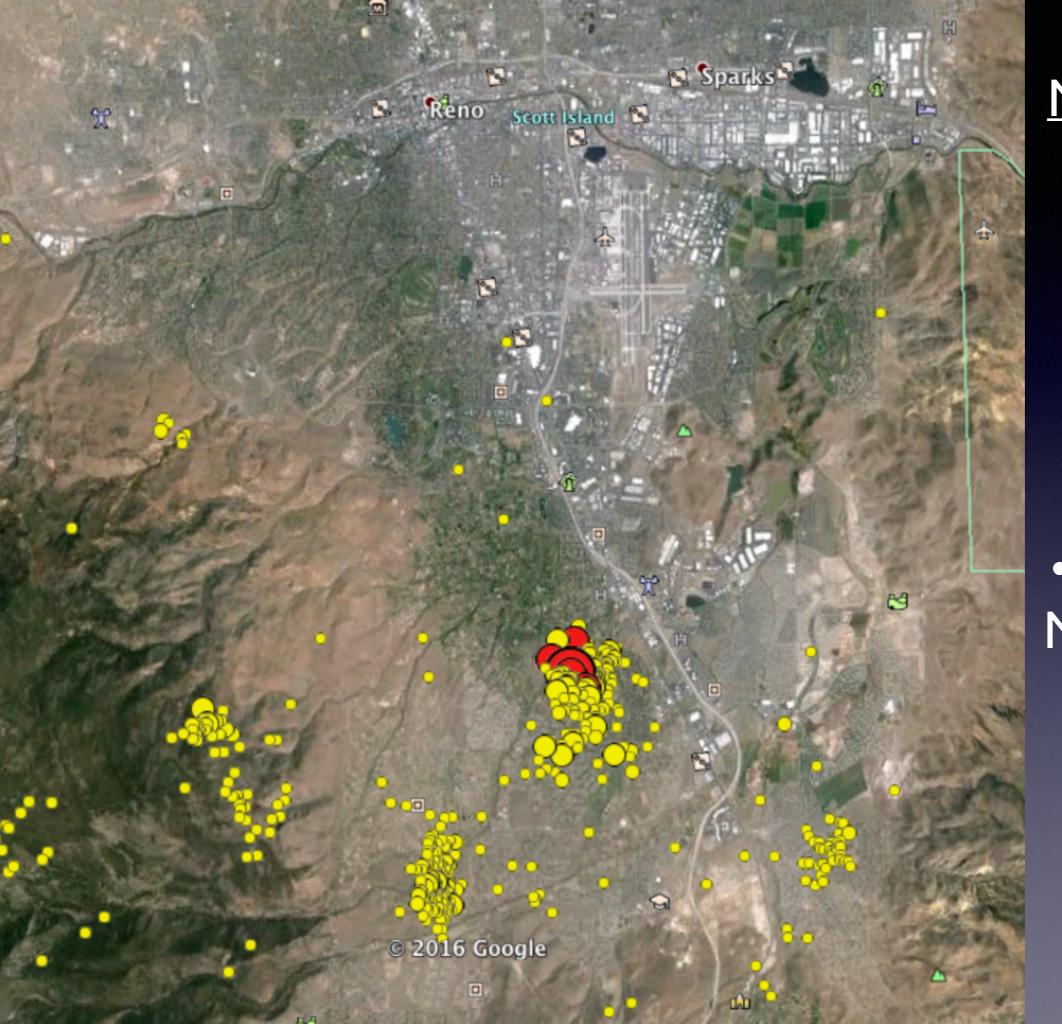
target: \$120K donations

Multi-Hazard



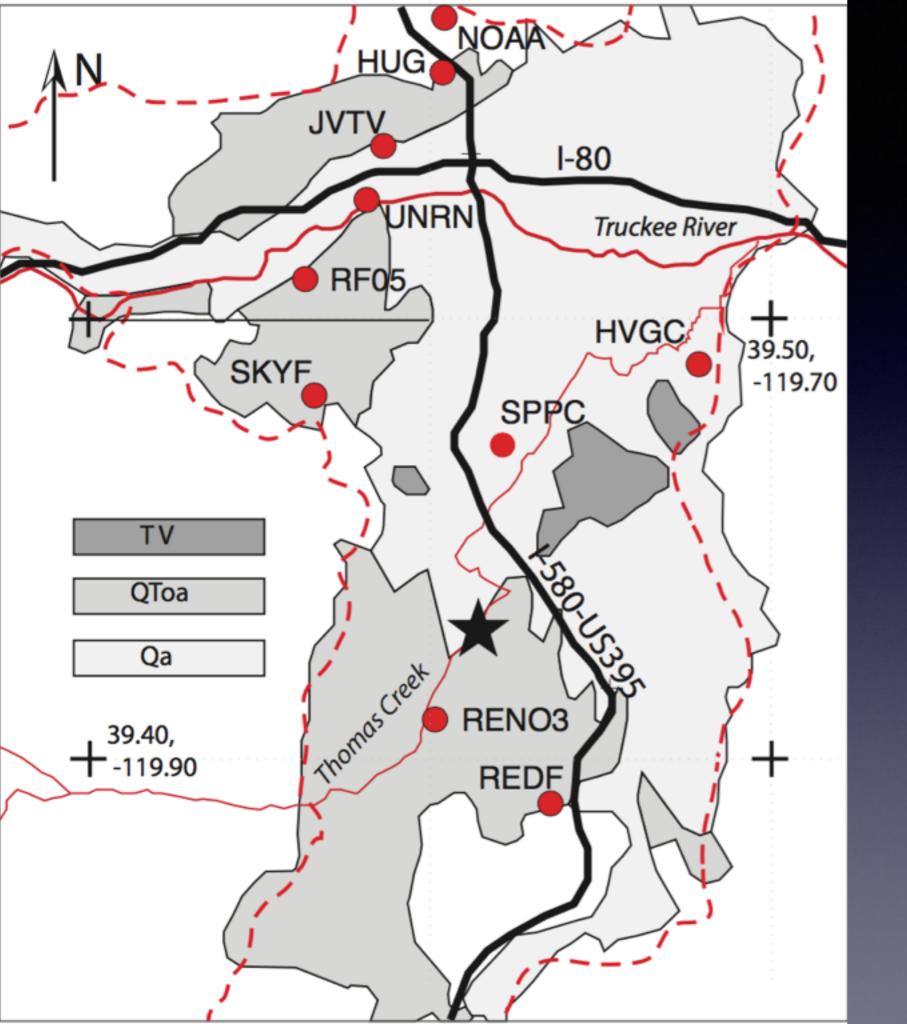
2015 EQs

- 2 M4.8
- 21 > M4
- 191 > M3
- 19,040 total

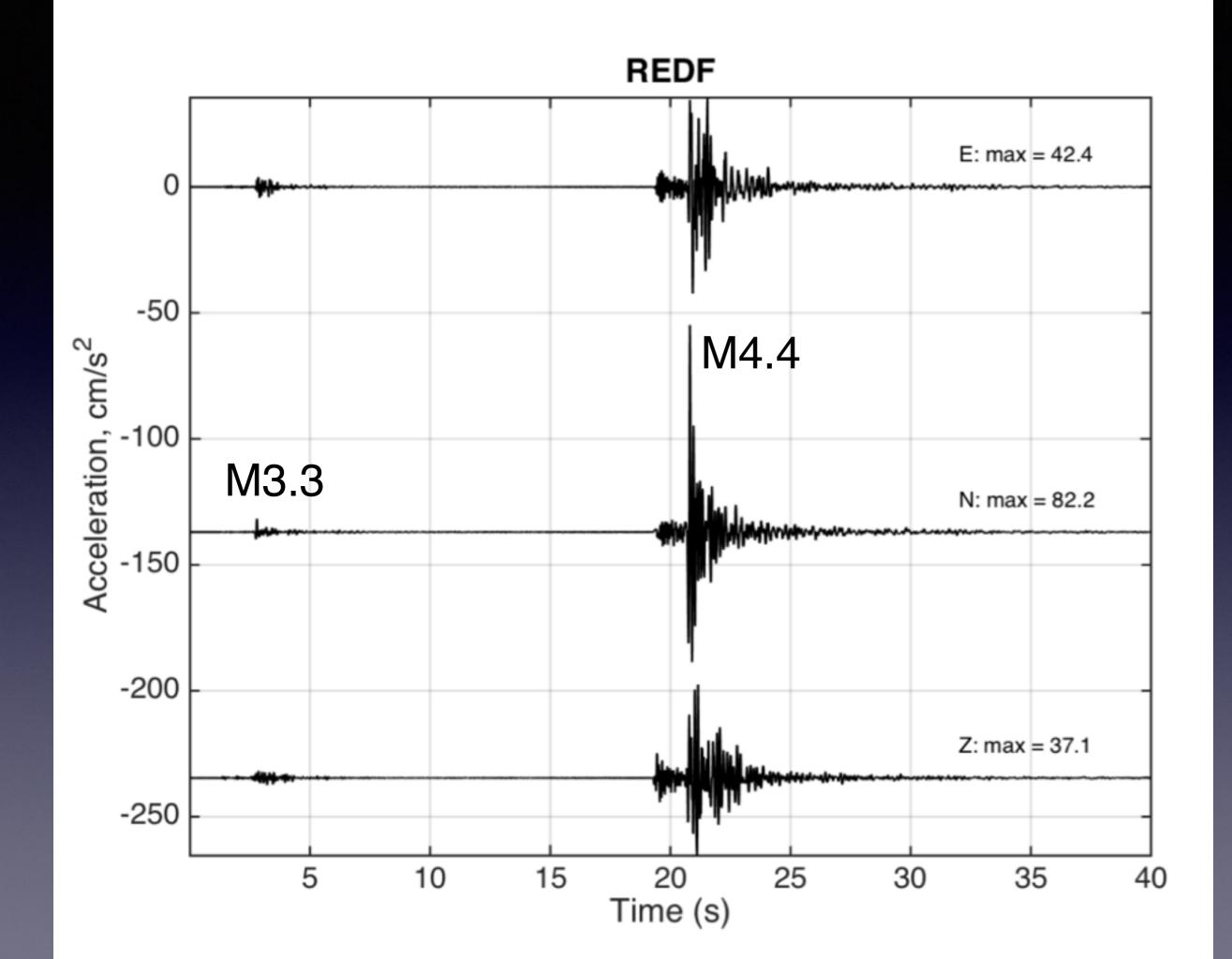


M4.4 Thomas Creek EQ

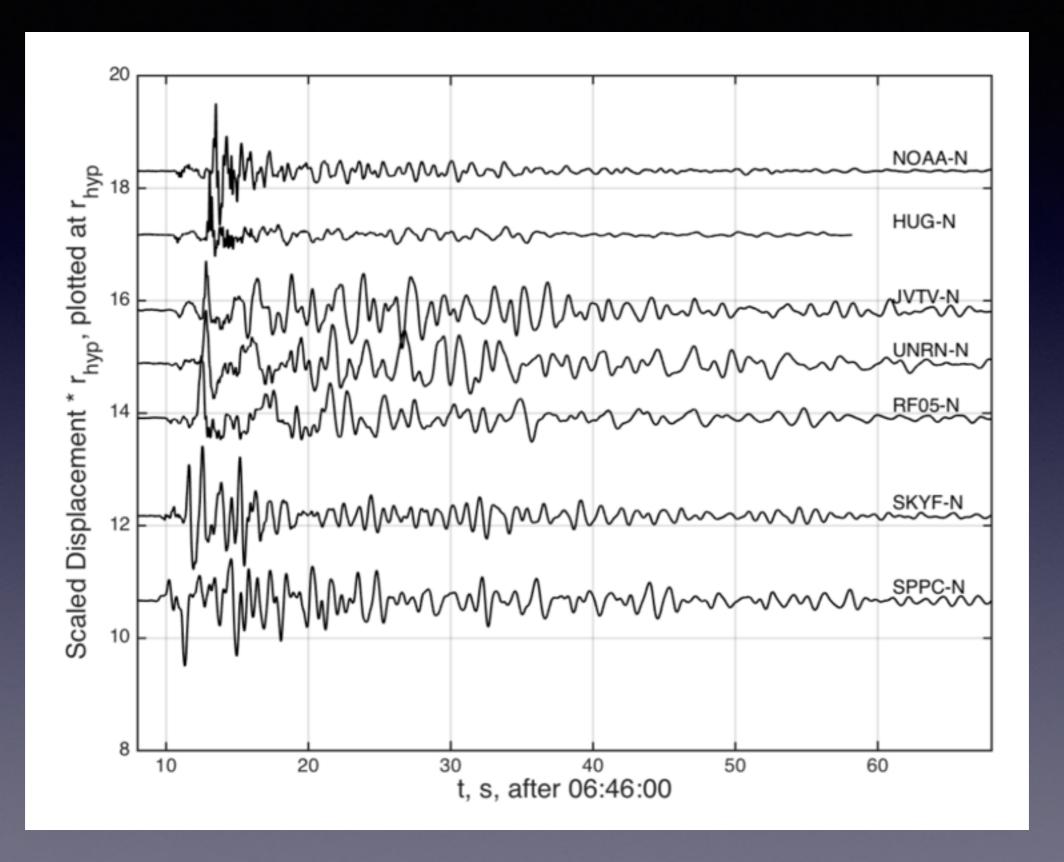
- 100s aftershocks
 - normal fault
- •antithetic to Mt. Rose fault zone



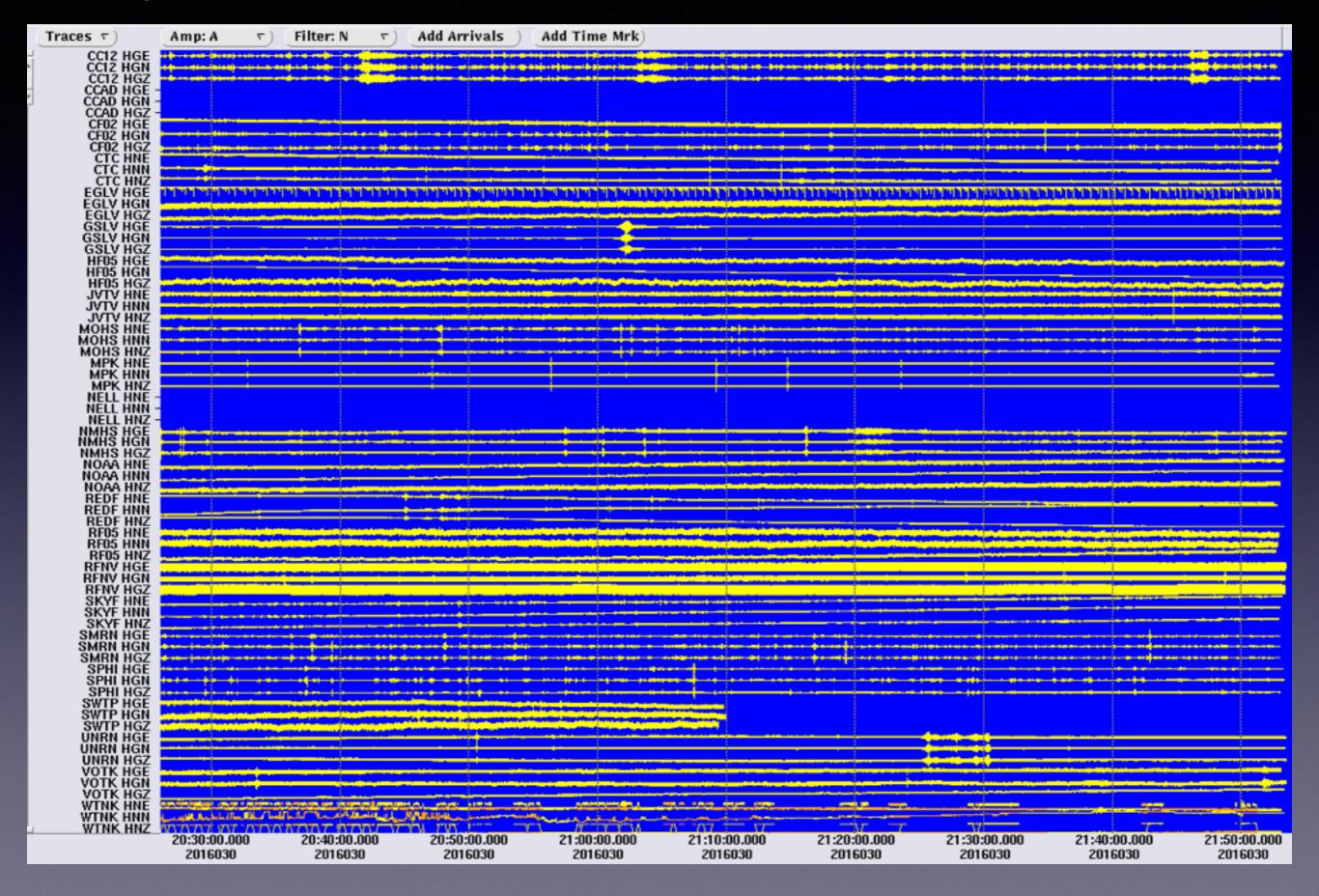
Operating SM Reno Stations



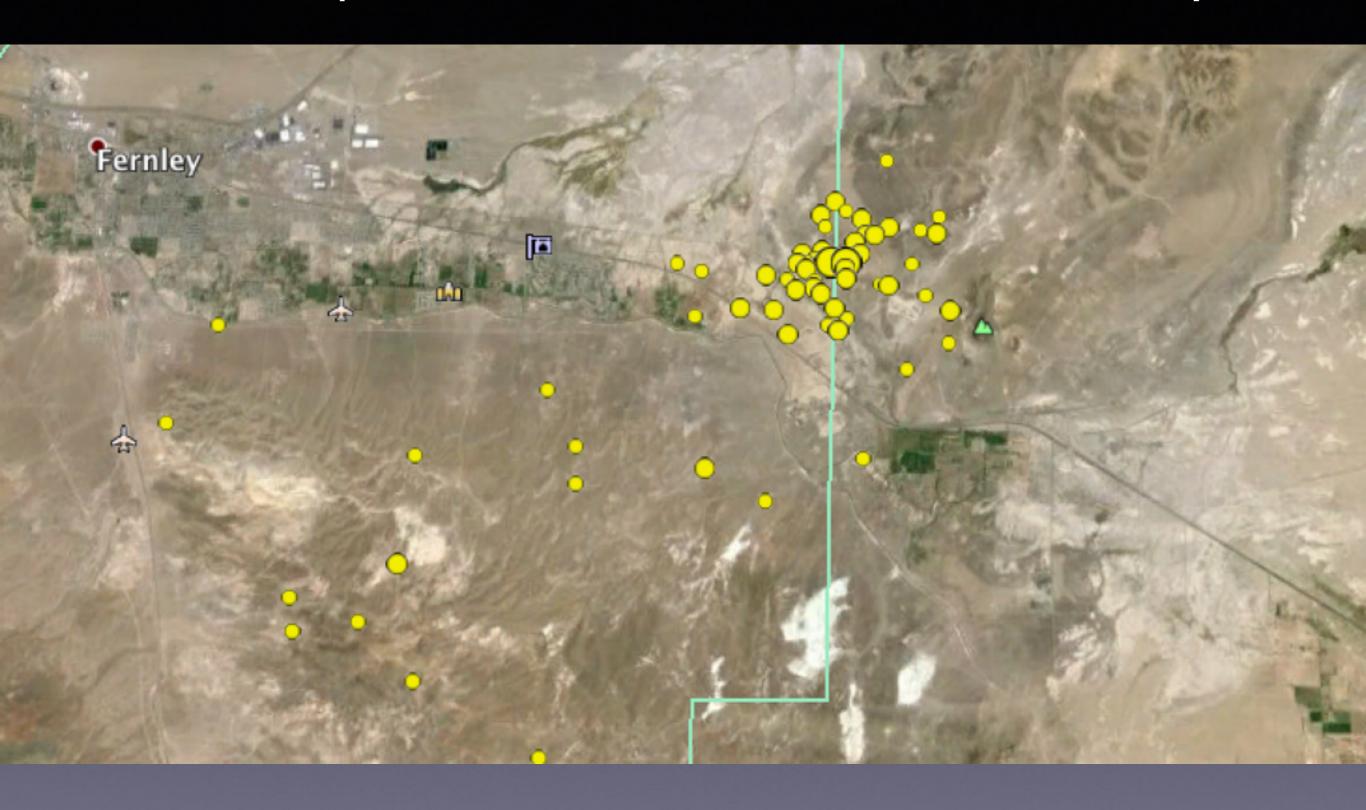
Source time function: 1/2 s; shaking 30-40 s



Strong Motion Status



M2.8 Sequence—Geothermal Plant east of Fernley

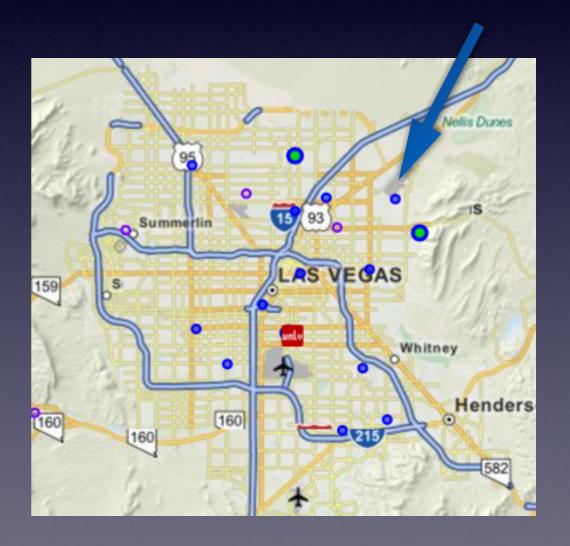


- two broadband replacements: Watertank & Mohave High School
- UNLV Humanities Bldg comm. upgrades
- Nell comm. upgrades, power-total rebuild
- upcoming Black Mt. comm. rebuild, fire camera too
- two new broadband 120s, spring 2016
- replace 2.4 GHz with 4.9 GHz for strong motion network



NELL comm. upgrade

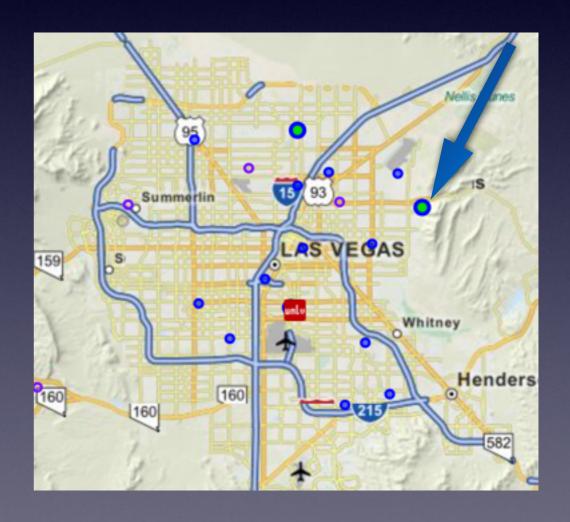
new solar, batteries, comm. shots to WaterTank, Opal & Black Mt.





WTNK comm. upgrade

new power, comm. shots to Cheyenne & MOHS, new Compact BB sensor





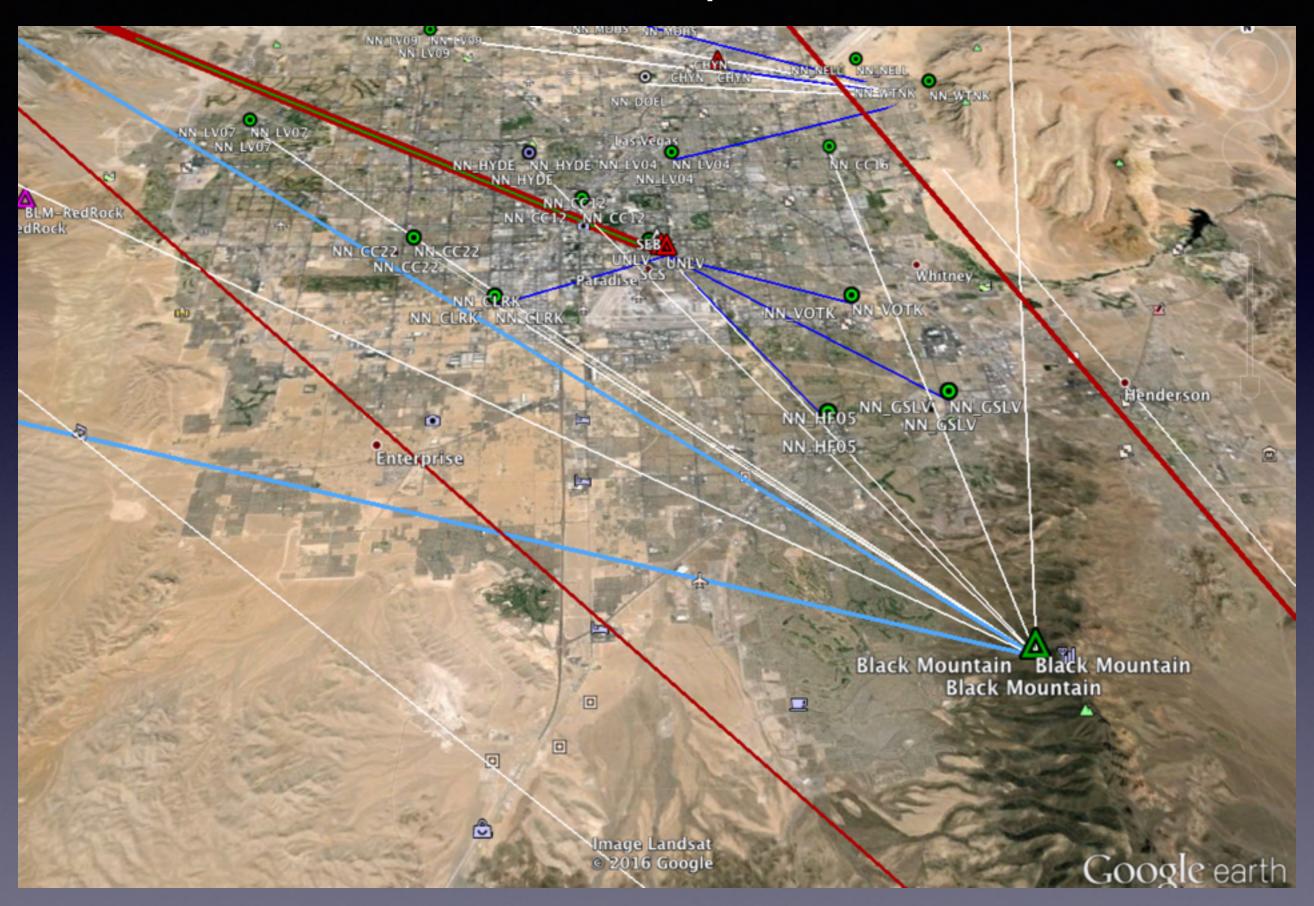
Black Mt. upgrade

new everything, comm. shots to Angel Peak, Nellis, etc..

fire camera



Black Mt. paths



White House Earthquake Resilience Summit



DOI Sec. Jewell mentioned bringing EEW to Nevada



USGS Director Kimball mentioned expanding EEW to urban cities in the west, including Reno and Las Vegas

https://www.whitehouse.gov/live/white-house-earthquake-resilience-summit